

**CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE
2003 ANNUAL REPORT**

This report is prepared in compliance with Article V of the Bylaws of the California Traffic Control Devices Committee (CTCDC).

2003 VOTING MEMBERS

Mr. John Fisher LOCC	Chairman Assistant General Manager City of Los Angeles, DOT 221 N. Figueroa Street, Suite 500 Los Angeles, CA 90012
Mr. Farhad Mansourian CSAC	Vice Chairman Director of Public Works Marin County, P.O. Box 4186 San Rafael, CA 94913
Mr. Gary Meis CDOT	Division of Traffic Operations California Department of Transportation 1120 N Street, MS36 Sacramento, CA 95814
Ms. Merry Banks CSAA	Manager Traffic Safety Dept. California State Automobile Association 150 Van Sacramento Ness Avenue MSA03C, San Francisco, CA 94102-1860
Mr. Jacob Babico CSAC	Chief of Traffic Division, DPW San Bernardino County 825 East Third Street San Bernardino, CA 92415
Capt. Bridget Lott DCHP	California Highway Patrol 2555 First Avenue Sacramento, CA 95818
Mr. Ed Von Borstel LOCC	Deputy Director Public Works & Transportation City of Modesto, 1010 Tenth Street Modesto, CA 95353
Mr. Hamid Bahadori LOCC	Principal Transportation Engineer Auto Club of Southern California, 3333 Fairview Road Costa Mesa, CA 92626

The following alternate members were designated by the parent organizations to act in the absence of their appointed voting members:

2003 ALTERNATE MEMBERS

Mr. Mark Greenwood LOC	Engineering Manager City of Palm Desert 73-510 Fred Waring Dr. Palm Desert, CA 92260
Mr. John Presleigh CSAC	Assistant Director Transportation Division Santa Cruz County DPW Santa Cruz, CA 95060
Mr. Devinder Singh CDOT	Division of Traffic Operations California Department of Transportation 1120 N Street, MS36 Sacramento, CA 95814
Mr. Lewison Lem CSAA	Transportation Policy Manager California State Automobile Association 100 Van Ness Ave 16 th Floor, San Francisco, CA 94102
Mr. George Johnson CSAC	Transportation Director, DPW Riverside County P.O. Box 1090, Riverside, CA 92502
Mr. John Olejnik DCHP	California Highway Patrol 2555 First Avenue Sacramento, CA 95818
Mr. Glan Aggarwal LOCC	Deputy Director Public Works City of Vacaville 650 Merchant Street, Vacaville, CA 95688
Ms. Marie Simon ACSC	Transportation Engineer Auto Club of Southern California 3333 Fairview Road, A131 Costa Mesa, CA 92626

SECRETARY

Mr. Devinder Singh CDOT	Senior Transportation Engineer 1120 N Street, MS36 Sacramento, CA 95814
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2003 MEETINGS

Date	Location
March 13, 2003	320 4 th Street (Carmel Room A), Los Angeles 90012
June 5, 2003	1727 30 th Street (Conference Room FM#3), Sacramento 95816.
September 24, 2003	1727 30 th Street (Conference Room FM#3), Sacramento 95816.

2003 CTCDC AGENDA ITEMS

<u>Agenda Item No.</u>	<u>Title</u>
98-18	Ground Mounted Led Lights on Stop Bars
99-11	MUTCD Adoption By Caltrans
00-1	Bicycle Pavement Markings
00-9	Pedestrian Countdown Signal Head
01-11	Portable or Temporary Speed Display Sign
01-12	Blinker Stop Sign
02-9	Mandatory Requirement of Accessible Pedestrian Signals
02-10	Pedestrian Countdown Signal Heads (PCSHs)
02-16	Traffic Signal Warrants 1 & 2
03-1	Speed Feedback (Radar Speed) Sign
03-2	Establishment of Speed Limit on Unpaved Roads
03-3	National Weather Services Signing (Tsunami)
03-4	Radar Speed (Speed Feedback) Display Sign
03-5	Radar Speed (Speed Feedback) Display Sign
03-6	Radar Speed (Speed Feedback) Display Sign
03-7	Vehicle Activated Lighted Stop Sign (Active-Stop)
03-8	Steer Clear Sign (Drive Damaged Vehicle to Shoulder)
03-9	Signs Required by California Vehicle Code
03-10	Pedestrian Countdown Signal Heads
03-11	Pedestrian Countdown Signal Heads
03-12	Proposal to Revise the Existing 55 Maximum Speed Limit R6-1 Sign
03-13	Variable Speed Limit Sign
03-14	Exit Numbering on Signalized Intersections
03-15	Radar Speed Sign

INFORMATION ITEMS:

- 99-11 MUTCD Adoption by Caltrans
- 00-1 Bicycle Pavement Marking
- 01-12 Blinker Stop Sign
- 03-10 Pedestrian Countdown Signal Heads (PCSHs)
- 03-11 Pedestrian Countdown Signal Heads (PCSHs)

DISCUSSION ITEMS:

- 03-2 Establishment of Speed Limit on Unpaved Roads
- 03-3 National Weather Services Signing (Tsunami)
- 03-8 Steer Clear Sign (Drive Damaged Vehicle to a Shoulder)
- 03-9 Signs Required by California Vehicle Code

COMMITTEE ACCOMPLISHMENTS**98-18 Ground Mounted Led Lights on Stop Bars**

John Lower, Traffic and Transportation Manager, City of Anaheim, informed that the installation cost of the LEDs was about \$50,000 and the operation of the LEDs required high maintenance attention. At a typical intersection, if there is an accident problem and the intersection meets minimum accidents warrant, he would prefer to consider traffic signals rather than LEDs. Committee recommended that all new requests should come to the Committee and the individuals should present their justification to the Committee for experimentation with LED's at the signalized intersections. The Committee further commented that they are not prepared to recommend the use of LEDs at a signalized intersection as an official traffic control device in California.

00-9 Pedestrian Countdown Signal Head

The Committee accepted the final report submitted on PCSHs by the City of Stockton and allows the City to continue use of the devices, until the Committee makes a final decision.

02-9 Mandatory Requirement of Accessible Pedestrian Signals (APS)

Committee recommended Caltrans adopt the following in the Section 4E.06 APS (California Supplement) under “support”:

“Signalized intersections with the following characteristics may be considered for APS during initial installation or during upgrading:

- a. Intersections near the blind centers and senior citizen centers.
- b. Transit Terminals.
- c. T-type intersections
- d. Wide intersections.
- e. Intersections with unusual geometry.
- f. Skewed intersections
- g. Mid-block crosswalks
- h. Intersection with exclusive phasing
- i. Intersections with leading pedestrian intervals.
- j. Intersections with frequent side street calls, and;
- K. Intersections with high turning volumes.

02-10 Pedestrian Countdown Signal Heads (PCSHs)

Committee authorized the CTCDC Chairman to approve requests for the experimentation for countdown signal heads as long as they comply with the guidelines approved for the experimenting agencies. The authorization is until such time that Caltrans adopts this device in California. The Chairman will bring those approvals as information items at CTCDC meetings.

03-1 Speed Feedback (Radar Speed) Sign

The Committee authorized the City of Whittier to experiment with “speed feedback” signs at the 14 school locations. The speed feedback sign is to be placed after the standard school speed limit sign.

03-2 Establishment of Speed Limit on Unpaved Roads

The Committee members agreed that the Engineering and Traffic Survey, described in the Traffic Manual could be used for any type of roadways for setting a speed limit including the dirt roads. Also, the “basic speed law” CVC Section 22350 applies on all types of roadways:

22350. No person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed, which endangers the safety of persons or property.

03-3 National Weather Services Signing (Tsunami)

The National Oceanic and Atmospheric Administration (NOAA) had requested installation of Tsunami signage on State Highways to guide the public in case of evacuation due to a Tsunami. Committee noted that the NOAA is a federal agency, therefore they should work with the Federal Highway Administration (FHWA) to

develop a standard sign which could be used nationwide. The NOAA agreed with Committees' suggestion and stated that they will work with FHWA.

01-11 Portable or Temporary Speed Display Sign

Committee recommended that Caltrans adopt the text from Revision 2 of the MUTCD 2000, Section 2B.11 into the Traffic Manual. Caltrans clarified the Section and adopted as follows:

“A Vehicle Speed Feedback Sign that displays to approaching drivers the speed at which they are traveling may be installed in conjunction with an R-2 Speed Limit Sign. If a Vehicle Speed Feedback Sign displaying approach speeds is installed, the legend shall be YOUR SPEED XX. Legend shall be white, yellow, yellow-green or amber color on black background. When activated, lights shall be steady-burn conforming to the provisions of California Vehicle Code Sections 21466 and 21466.5.”

03-4 Radar Speed (Speed Feedback) Display Sign

Committee approved experimentation with the radar speed sign (speed limit and your speed) during school hours, as requested by the City of San Jose. Approximately one half of the experiment should use the two different formats. The experimental signs will be supplemental to the standard school signings (Assembly C and Assembly B).

03-5 Radar Speed (Speed Feedback) Display Sign

Committee approved experimentation with the radar speed sign (speed limit and your speed) during school hours, as requested by the City of Vacaville. Approximately one half of the experiment should use the two different formats. The experimental signs will be supplemental to the standard school signings (Assembly C and Assembly B).

03-6 Radar Speed (Speed Feedback) Display Sign

Committee approved experimentation with the radar speed sign (speed limit and your speed) during school hours, as requested by the City of San Mateo. Approximately one half of the experiment should use the two different formats. The experimental signs will be supplemental to the standard school signings (Assembly C and Assembly B).

03-7 Vehicle Activated Lighted Stop Sign (Active-Stop)

Committee approved the experiment request subject to FHWA approval. The City agrees to apply with FHWA for experiment approval and the CTCDC will concur with the FHWA decision. The City will notify the CTCDC Chairman in writing about the FHWA decision.

03-8 Steer Clear Sign (Drive Damaged Vehicle to Shoulder)

CHP stated that the sign is a strategy to educate motorists involved in a non-injury or property damage incident to move their vehicle onto the shoulder. The sign would be a helpful tool to reduce non-recurring congestion from congested highways, such as Bay Area, Los Angeles or other highways having a congestion problem. Committee suggested that Caltrans and CHP work together on the strategy and bring back to the Committee, if further discussion is needed.

03-9 Signs Required by California Vehicle Code

Caltrans promised to revisit the “Golf Cart” signing to determine whether there is a better message which will satisfy the CVC Sections. If there is a need to discuss with the Committee they will do that. Any major change will be placed on agenda for Committee to review

03-12 Proposal to Revise the Existing 55 Maximum Speed Limit R6-1 Sign

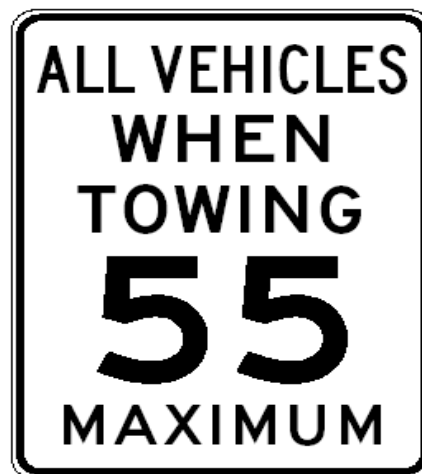
The Committee agreed with Caltrans proposal to revise the existing 55 maximum speed limit sign R6-1 be replaced with the proposed R6-3 and R6-4 signs as illustrated:

Existing Single Sign

R6-1 (48" x 60")

Proposed 2 Separate Signs

R6-3 (48" x 60")



R6-4 (48" x 60")

EXISTING

POLICY: R6-1

The AUTOS WITH TRAILERS, TRUCKS - 55 MAXIMUM sign (R6-1) shall be placed in designated highway sections where the maximum speed in excess of 55 mph is permitted. The R6-1 sign shall be installed approximately 750 feet following each SPEED LIMIT ____ sign (R2) or MAXIMUM SPEED ____ sign (R6) in the designated sections. See CVC Section 22406.

PROPOSED

POLICY: R6-3

The TRUCKS, 3 AXLES OR MORE 55 MAXIMUM sign (R6-3) shall be placed in designated highway sections where the maximum speed in excess of 55 mph is permitted. The R6-3 sign shall be installed approximately 750 feet following each SPEED LIMIT ____ sign (R2) or MAXIMUM SPEED ____ sign (R6) in the designated sections. See CVC Section 22406.

POLICY: R6-4

The ALL VEHICLES WHEN TOWING 55 MAXIMUM sign (R6-4) shall be placed in designated highway sections where the maximum speed in excess of 55 mph is permitted. The R6-4 sign shall be installed approximately 750 feet following each TRUCKS 3 AXLE OR MORE 55 MAXIMUM sign (R6-3) in designated sections. See CVC Section 22406.

03-13 Variable Speed Limit Sign

Committee approved experimentation with a variable speed limit sign to display a 25-mph speed limit during the opening/dismissal of school hours and the sign will be blank during other school hours.

03-14 Exit Numbering on Signalized Intersections

Committee approved the experiment for a 12-month period with the following conditions:

- Ensure the color provides visibility and retroreflectivity during day and night times.
- Advertise and out reach to publicize the numbering scheme.

- Provide two reports on the post data, including survey (if possible) to the Committee. First report after six months and the second report after 12-months (at the conclusion of the experiment) period.

03-15 Radar Speed Sign Radar Speed Sign

Committee authorized the CTCDC Chairman to approve any future experimentation requests for the “speed limit/radar speed feedback” sign as long as they comply with the guidelines approved for the City of San Jose, San Mateo and the City of Vacaville. The authorization is until the Committee concludes the ongoing experiments. The Chairman will bring those approvals as information items during future CTCDC meetings.

SUMMARY OF ACCOMPLISHMENTS 2003

- 1 item carried over from 1998
- 1 item carried over from 1999
- 2 items carried over from 2000
- 2 items carried over from 2001
- 3 items carried over from 2002
- 24 items considered in 2003
- 15 items introduced in 2003
- 18 item completed in 2003
- 6 items not completed in 2003

ITEMS CARRIED INTO FUTURE YEAR

- 99-11 MUTCD Adoption by Caltrans
- 00-1 Bicycle Pavement Markings
- 01-12 BlinkerStop Sign
- 02-16 Traffic Signal Warrants 1 & 2
- 03-10 Pedestrian Countdown Signal Heads
- 03-13 Pedestrian Countdown Signal Heads

ACTIVE ITEMS APPROVED FOR EXPERIMENTATION

- 99-10 TACTILE PEDESTRIAN INDICATORS
(Experiment Agency-City of Los Angeles)
- 99-12 SPEED STRIPING FOR SMART CROSSWALKS
(Experiment Agency-Caltrans D7)
- 99-13 ILLUMINATED PAVEMENT MARKERS ON
MEDIAN BARRIERS (Experiment Agency-Caltrans D7)
- 00-1 BICYCLE PAVEMENT MARKING
(Experiment Agency-City of San Francisco)
- 00-5 USE OF LED PAVEMENT MARKERS AS A LEFT TURN GUIDANCE DEVICE
(Experiment Agency-City of Stockton and Caltrans D10)
- 00-6 PEDESTRIAN COUNTDOWN SIGNAL HEADS
(Experiment Agency-City of San Francisco)
- 01-3 PEDESTRIAN COUNTDOWN SIGNAL HEAD
(Experiment Agency-City of Fountain Valley)
- 01-4 TACTILE PEDESTRIAN INDICATOR WITH AUDIABLE INFORMATION
(Experiment Agency-The City of Santa Cruz)
- 01-7 PEDESTRIAN COUNTDOWN SIGNAL HEAD
(Experiment Agency-The City of Oakland)
- 01-9 IN-ROADWAY WARNING LIGHTS AT R/R CROSSINGS
(Experiment Agency-California Public Utilities Commission)
- 01-12 BLINKERSTOP SIGN
(Experiment Agency-Caltrans, Tulare Co., Marin Co.)
- 02-2 PEDESTRIAN COUNTDOWN SIGNAL HEAD
(Experiment Agency-City of Berkeley)
- 02-4 PEDESTRIAN COUNTDOWN SIGNAL HEADS
(Experiment Agency-County of San Luis Obispo)
- 02-11 Speed Feedback (Radar Speed) Sign
(Experimentation Agency-City of Garden Grove)
- 02-14 Speed Feedback (Radar Speed) Sign
(Experimentation Agency-County of Mendocino)
- 02-15 Radar Guided Dynamic Curve Warning System
(Experimentation Agency-Caltrans D5)
- 03-1 Speed Feedback (Radar Speed) Sign

(Experimentation Agency – City of Whittier)

- 03-4 Radar Speed Sign
(Experiment Agency – City of Vacaville)
- 03-5 Radar Speed Sign
(Experiment Agency – City of San Mateo)
- 03-6 Radar Speed Sign
(Experiment Agency – City of San Jose)
- 03-13 Variable Speed Limit Sign
(Experiment Agency – City of Campbell)
- 03-14 Numbering of Signalized Intersections
(Experiment Agency – CVAG)
- 03-15 Radar Speed Sign
(Experiment Agency – City of Fremont)

STATUS OF CALTRANS ACTION ON PAST ITEMS

- Item 93-18 CROSSWALKS, SEQUENTIAL LIGHTING (In-Roadway Warning Lights (IRWL) at Crosswalks)
Caltrans has adopted the policy and Standard Special Provisions (SSP) for the IRWLs
- Item 99-3 AUDIBLE PEDESTRIAN SIGNAL POLICY
Caltrans will work with the CTCDC, the California Council of the Blind (CCB) and with individuals who are interested in this item to resolve along with the Agenda Item 01-5, “Accessible Pedestrian Signals.”
- Item 01-1 U-TURN SIGNAL HEADS INDICATOR
Caltrans will develop appropriate standards to ensure visibility and make the U-turn signal head indicator an official traffic control device by inclusion in the Caltrans Traffic manual.
- Item 01-6 SUPPLEMENT SIGNS ON CHANNELIZERS
Caltrans will work with the Committee on this item.
- Item 00-4 USE OF RAISED PAVEMENT MARKERS IN TRANSVERSE PATTERN
Caltrans will take appropriate action on the recommendation made by the Committee.
- Item 01-5 ACCESSIBLE PEDESTRIAN SIGNALS
Caltrans will take appropriate action to adopt the MUTCD verbiage into the Traffic Manual.
- Item 02-3 RIGHT EDGELINE
Caltrans will take appropriate action on the recommendation made by the Committee.

MISCELLANEOUS

Chairman Larsen presented a plaque to Mr. Wayne Tanda who has resigned from the CTCDC due to his new assignment as a General Manager with the Department of Transportation, City of Los Angeles. He thanked Wayne for his 10-year contribution to the profession of traffic engineering to promote uniformity in traffic control devices and in particular developing new traffic control devices for the State of California.

John Fisher, Vice Chairman, CTCDC, presented a plaque to Jim Larsen who has announced his retirement from the County of Tulare effective March 31, 2003. John thanked Mr. Larsen for his services to the Committee since 1998.

Jacob Babico, Alternate Member will replace Jim Larsen as a voting member and George Johnson, Riverside County, will be the alternate to Jacob Babico. John Olejnik will represent CHP as a Alternate member.

CTCDC Agenda, Minutes, Annual Reports, and other information is available on the Internet at " <http://www.dot.ca.gov/hq/traffops/signtech/newtech/>" under the Office of Signs and Delineation web page.

Additional information regarding the minutes of the CTCDC meetings held during 2003 may be obtained upon request from the Secretary or any member of the California Traffic Control Devices Committee.

SIGN SPECIFICATIONS

All additions, revisions and deletions of approved sign specifications made by Caltrans during 2003, will be distributed separately. Partial list of signs is available at the following web site:

<http://www.dot.ca.gov/hq/traffops/signtech/signdel/specs.htm>

As provided in California Vehicle Code Sections 21400 and 21401, a list of new and revised specification sheet for signs used on streets and highways in California is available from the Caltrans Publications Unit, 1900 Royal Oaks Drive, Sacramento, CA 95815, phone (916) 445-3520.

Respectfully submitted by Devinder Singh, Secretary, CTCDC